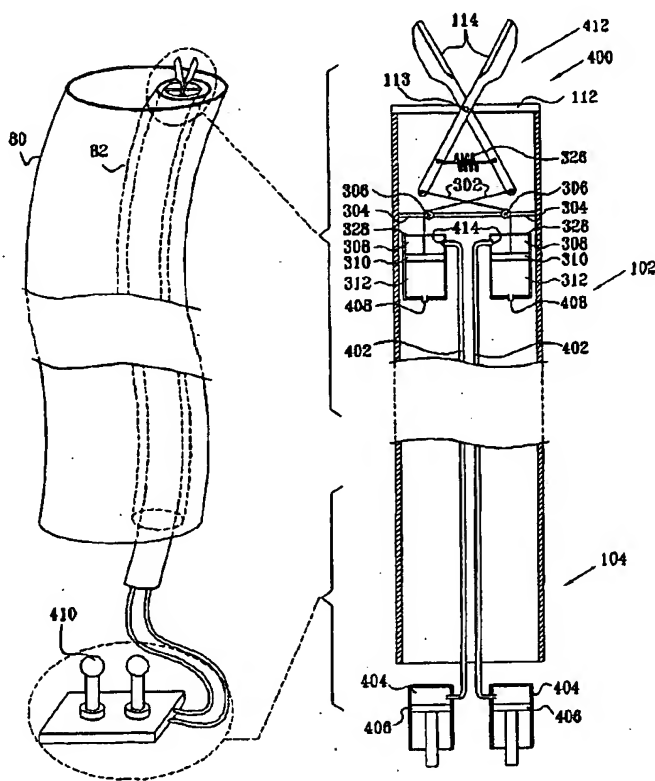




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- (71) Applicant (for all designated States except US): SIGHT-LINE TECHNOLOGIES LTD. [IL/IL]; Advanced Technology Center (MATAM), 31905 Haifa (IL).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): OZ, Dan [IL/IL]; 18 Vatikim Street, 40500 Even Yehuda (IL).
- (74) Agents: SANFORD T. COLB & CO. et al.; P.O. Box 2273, 76122 Rehovot (IL).
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[Continued on next page]

- (54) Title:** PISTON-ACTUATED ENDOSCOPIC TOOL



**(57) Abstract:** Endoscopic apparatus (400) is provided, having a distal end (102) for insertion into a body of a patient and a proximal end (104) that is held outside the body of the patient. The apparatus (400) includes a proximal cylinder (404), disposed in a vicinity of the proximal end (104) of the endoscopic apparatus (400). A proximal piston (406) is slidably contained within the proximal cylinder (404). A distal cylinder (328) is disposed in a vicinity of the distal end (102) of the endoscopic apparatus (400), and a distal piston (310) is slidably contained within the distal cylinder (328). A tube (402) for containing a liquid is coupled between the proximal (404) and distal (328) cylinders. A tool (e.g., biopsy tool 412) is coupled to be actuated by displacement of the distal piston (310), so as to perform a mechanical action on tissue of the body or contents of the body, responsive to displacement of the distal piston (310).



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